11.02.02. Digital Color Infrared Aerial Imagery 12 Jun 02

1.0 File Format

Individual aerial images are three band geotif images with associated georeferenced world files. Non-georeferenced images are in jpeg format. Mosaic images are three band geotif or jpeg images with associated world files.

2.0 Theme Metadata

None

3.0 Description

Color infrared (CIR) images are composed of three spectral bands in the visible and near infrared wavelengths. Near-infrared reflected light is assigned to the red color channel of the image, red visible light is assigned to the green color channel, and green visible light is assigned to the blue color channel. Band intervals are comparable to Landsat and ASTER. This CIR imagery is not radiometrically calibrated. Spatial resolution varies with the aircraft altitude above terrain. Images of the non-georeferenced dataset may be viewed sequentially to follow the flight path along the stream corridor or lakeshore.

Near-infrared light is strongly reflected by healthy leaf tissues. Vigorous vegetation appears bright red in CIR images. Clean water absorbs most infrared light so appears dark in CIR. Waterborne algae and soil sediment increase infrared reflectance giving some eutrophic or polluted waters a brighter reflectance.

4.0 Projection

Universal Transverse Mercator Zone 11 North, North American Datum of 1927.





